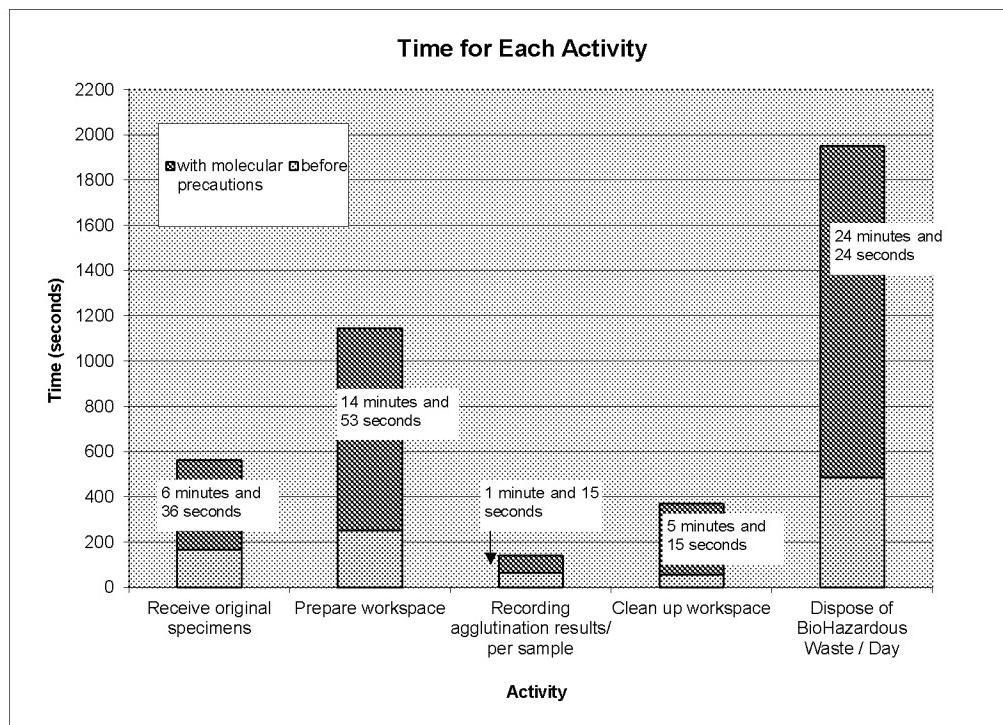


Time in the Enteric Laboratory:
before and after incorporating molecular precautions



| | before | with molecular precautions | total |
|---|--------|----------------------------|-------|
| Receive original specimens | 167 | 396 | 530 |
| Prepare workspace | 252 | 893 | 1145 |
| Recording agglutination results/ per sample | 67 | 75 | 142 |
| Clean up workspace | 56 | 315 | 371 |
| Dispose of BioHazardous Waste / Day | 488 | 1465 | 1953 |

Incorporating Molecular Precautions: Description of additional steps

Incorporating Molecular Precautions has increased time for the following activities

| | |
|--------------------------------|-------------------|
| 1 Receiving Original Specimens | 6 minutes 36 sec |
| 2 Prepare Workspace | 14 minutes 53 sec |
| 3 Record Agglutination Results | 1 minute 15 sec |
| 4 Clean up Work space | 5 minutes 15 sec |

* The items highlighted in yellow are the added steps to reduce contamination downstream

1. Receive Original Specimens

| | |
|--|--------|
| Wipe down bench top with vesphene or 10% bleach | 31 sec |
| Open the outer container (cardboard) | 8 sec |
| Take out the secondary container (metal container) | 6 sec |
| Unfold the specimen submission paper and stamp the receiving date | 38 sec |
| Update the outbreak paperwork (collection date sample received) | 30 sec |
| Use tweezers to remove the cotton ball and lift the primary container high enough to check integrity of the plastic vial; if not leaking place in the metal Para-pak holder tray | 15 sec |
| Verify the primary container has at least one identifier on the tube, and that the collection date on the tube matches the paperwork | 8 sec |
| Wipe down the benchtop with vesphene | 31 sec |

Original Time: 2 minutes 47 sec

2. Prepare Workspace

On the Bench

With Molecular Precautions

| | |
|---|---------------------|
| Prepare benchtop: disinfect benchtop and metal tray with vespene; place down absorbent pads | 3 minutes 1 second |
| Put on second set of gloves | 37 seconds |
| Open the outer container (cardboard) using a bleach wipe; wipe down surface of outer container | 11 seconds |
| Take out the secondary container (metal container) using a bleach wipe; wipe down surface of secondary container, and take off cap | 12 seconds |
| Unfold the specimen submission paper and stamp the receiving date | 38 seconds |
| Update the outbreak paperwork (collection date sample received) | 30 seconds |
| Use a bleach wipe to disinfect the tweezers; Use tweezers to remove the cotton ball and lift the primary container high enough to check the integrity of the plastic vial; if not leaking place in the metal Para-pak holder tray | 37 seconds |
| Wipe the primary container with a bleach wipe and verify the primary container has at least one identifier on the tube, and that the collection date on the tube matches the paperwork | 8 seconds |
| Change outer pair of gloves | 30 seconds |
| Disinfect stapler, time date stamp, tweezers | 33 seconds |
| Discard benchtop absorbant pad and disinfect benchtop | 1 minute 58 seconds |

Extra Time 6 minutes 36sec**TOTAL Time (Orig + Extra)** 8 minutes 50 sec**In the Hood with Molecular Precautions**

| | |
|---|-----------|
| Turn on the Biosafety Cabinet and let run for @ 5 minutes | 5 minutes |
|---|-----------|

Incorporating Molecular Precautions: Description of additional steps

| | |
|--|---------|
| put on lab coat and gloves | 18 sec |
| Wipe down counter top with Vesphene | 31 sec |
| | |
| Use china marker to create columns (20/glass slide) | 150 sec |
| Place all work materials on bench;open discard container | 53 sec |
| | |

Original Time: 4 minutes 12 sec

3. Recording Agglutination Results (per Sample)

| On the Bench | |
|---|----|
| | |
| Update IML with the results of all serogroups and factors you tested | 43 |
| Use a sharpie to record the serogroup results on the blood plate, TSI slant and T&T broth | 24 |

Original Time: 1 minute 7 sec

4. Clean Up

| On the Bench | |
|---|-------|
| Soak used glass slides in 10% bleach solution | 5 sec |
| | |

Incorporating Molecular Precautions: Description of additional steps

| | |
|--|----------------------|
| Place the "Restricted Access" sign on laboratory doors; lock door closest to the hood | 44 seconds |
| Put on gloves | 18 seconds |
| Disinfect workspace with 10% bleach followed by 70% ethanol to remove the corrosive bleach: Clean the handles of BSC, the chair back and seat, wipe down the BSC cabinet | 2 minutes 31 seconds |
| Load a rolling cart with supplies needed in the BSC | 2 minutes 17 seconds |
| Use china marker to create columns (6/petri dish) | 150 seconds |
| Place all work materials into cabinet (plus bag with vespene onto orange rack) | 3 minutes 53 seconds |
| Change gloves, and put on sleeves | 35 seconds |
| Place hands in cabinet to begin work and allow air to settle for 1 minute | 1 minute |
| Add a second pair of gloves on first set | 17 seconds |

Extra Time 14 minutes 53 sec

TOTAL Time to prepare workspace (Orig + Extra) 19 minutes 5 sec

In the Hood with Molecular Precautions

| | |
|--|------------|
| Record with sharpie on the blood plate; Positive and negative results of all serogroups and factors tested | 10 seconds |
| Discard outer pair of gloves, replace with new set | 37 seconds |
| Slowly pull out hands and transcribe all tests results from paper in the hood to a clean piece of paper | 28 seconds |
| Transcribe results of all serogroups and factors you tested from clean paper to IML | 43 seconds |
| Use a sharpie to record the serogroup results on the TSI slant and T&T broth | 24 seconds |

Extra Time 1 min 15 sec

TOTAL Time to record agglutination results (Orig + Extra) 2 minutes 22 sec

In the Hood with Molecular Precautions

| | |
|--|------------|
| Discard petri dish into metal pan | 5 seconds |
| Decontaminate materials: racks with 50 vials of antisera, blood plates, markers, before taking out of the hood | 59 seconds |

Incorporating Molecular Precautions: Description of additional steps

| | |
|---|--------|
| | |
| Wipe down bench top and keyboard with vespene or 10% bleach | 31 sec |
| Return antisera racks to refrigerator | 20 sec |

Original Time: 56 seconds _____

Incorporating Molecular Precautions: Description of additional steps

| | |
|---|----------------------|
| Discard biohazard bag with disposed needles, underpads and used outer gloves into the discard pan | 1 minute 11 seconds |
| Disinfect the work surface with 10% bleach followed by 70% ethanol to remove the corrosive bleach: Clean the handles of BSC, the chair back and seat, wipe down the BSC cabinet | 2 minutes 11 seconds |
| Bring cart full of supplies back to work bench | 48 seconds |
| Remove the "Restricted Access" sign on laboratory doors; unlock door closest to the hood | 37 seconds |
| Return antisera racks to refrigerator | 20 sec |

Extra Time 5 min 15 sec

TOTAL Time to clean up workspace (Orig + Extra) 6 minutes 11 sec